

IN THE CLAIMS:

Claims 1 through 3 are currently pending in the above-identified application. Please amend Claims 1 through 3, as follows:

1. (Currently Amended) A method for converting materials for modifying surfaces of semiconductor nanoparticles, comprising the steps of:
modifying semiconductor nanoparticles with oil-soluble materials for surface modification;
converting the oil-soluble materials for surface modification into water-soluble materials for surface modification at the interface between an organic solvent and water; and
shifting the semiconductor nanoparticles from an organic phase to an aqueous phase by the conversion wherein semiconductor nanoparticles are modified with oil-soluble materials for surface modification, the oil-soluble materials for surface modification are converted into water-soluble materials for surface modification at the interface between an organic solvent and water, and the semiconductor nanoparticles are shifted from an organic phase to an aqueous phase by said conversion.
2. (Currently Amended) A method for purifying semiconductor nanoparticles, comprising the steps of:
modifying semiconductor nanoparticles with oil-soluble materials for surface modification;
converting the oil-soluble materials for surface modification into water-soluble materials for surface modification at the interface between an organic solvent and water;
shifting the semiconductor nanoparticles from an organic phase to an aqueous phase by the conversion; and
subjecting the semiconductor nanoparticles, the surfaces of which have been modified with the water-soluble materials for surface modification, to size-selective photoetching, thereby regulating particle sizes of the semiconductor nanoparticles and monodispersing the semiconductor nanoparticles wherein semiconductor nanoparticles, the surfaces of which have been modified with the water-soluble materials for surface modification obtained by the method for converting materials for

~~modifying surfaces of semiconductor nanoparticles wherein semiconductor nanoparticles are modified with oil-soluble materials for surface modification, the oil-soluble materials for surface modification are converted into water-soluble materials for surface modification at the interface between an organic solvent and water, and the semiconductor nanoparticles are shifted from an organic phase to an aqueous phase by said conversion, are subjected to size-selective photoetching, thereby regulating particle sizes of the semiconductor nanoparticles and monodispersing them.~~

3. (Currently Amended) A method for purifying semiconductor nanoparticles, comprising the steps of:

modifying semiconductor nanoparticles with oil-soluble materials for surface modification;

converting the oil-soluble materials for surface modification into water-soluble materials for surface modification at the interface between an organic solvent and water;

shifting the semiconductor nanoparticles from an organic phase to an aqueous phase by the conversion; and

subjecting the semiconductor nanoparticles, the surfaces of which have been modified with the water-soluble materials for surface modification, to size-selective photoetching, whereby the dissolution caused thereby is utilized to peel the surfaces of the semiconductor nanoparticles, thereby converting the materials for surface modification wherein semiconductor nanoparticles, the surfaces of which have been modified with the water-soluble materials for surface modification obtained by the method for converting materials for modifying surfaces of semiconductor nanoparticles wherein semiconductor nanoparticles are modified with oil-soluble materials for surface modification, the oil-soluble materials for surface modification are converted into water-soluble materials for surface modification at the interface between an organic solvent and water, and the semiconductor nanoparticles are shifted from an organic phase to an aqueous phase by said conversion, are subjected to size-selective photoetching, and dissolution caused thereby is utilized to peel the surfaces of the semiconductor nanoparticles, thereby converting the materials for surface modification.